

Trying 31060000009999...Open

DIALOG INFORMATION SERVICES

PLEASE LOGON:

***** HHHHHHHH SSSSSSS? ### Status: Signing onto Dialog *****

ENTER PASSWORD:

***** HHHHHHHH SSSSSSS? *****

Status: Login successfulWelcome to DIALOG

Dialog level 05.10.03D

Last logoff: 16mar06 16:08:34

Logon file405 20mar06 10:30:58

*** ANNOUNCEMENTS ***

NEW FILES RELEASED

***Regulatory Affairs Journals (File 183)

***Index Chemicus (File 302)

***Inspec (File 202)

RELOADS COMPLETED

*** MEDLINE has been reloaded with the 2006 MeSH (Files 154 & 155)

*** The 2005 reload of the CLAIMS files (Files 340, 341, 942)

is now available online.

RESUMED UPDATING

***EDGARPLUS(TM)-Williams Act Filings (File 773)

***EDGARPLUS(TM)-Prospectuses (File 774)

***EDGARPLUS(TM)-Registration Statements (File 775)

***EDGARPLUS(TM)-6K, 8K, and 10C Filings (File 776)

***EDGARPLUS(TM)-10-K & 20F Filings (File 778)

***EDGARPLUS(TM)-10-Q Filings (File 779)

***EDGARPLUS(TM)-Proxy Statements (File 780)

Chemical Structure Searching now available in Prous Science Drug Data Report (F452), Prous Science Drugs of the Future (F453), IMS R&D Focus (F445/955), Pharmaprojects (F128/928), Beilstein Facts (F390), Derwent Chemistry Resource (F355) and Index Chemicus (File 302).

>>>For the latest news about Dialog products, services, content<<<

>>>and events, please visit What's New from Dialog at <<<

>>><http://www.dialog.com/whatsnew/>. You can find news about<<<

>>>a specific database by entering HELP NEWS <file number>.<<<

* * *

SYSTEM:HOME

Cost is in DialUnits

Menu System II: D2 version 1.7.9 term=ASCII

*** DIALOG HOMEBASE(SM) Main Menu ***

Information:

1. Announcements (new files, reloads, etc.)
2. Database, Rates, & Command Descriptions
3. Help in Choosing Databases for Your Topic
4. Customer Services (telephone assistance, training, seminars, etc.)
5. Product Descriptions

Connections:

6. DIALOG(R) Document Delivery
7. Data Star(R)

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/H = Help

/L = Logoff

/NOMENU = Command Mode

Enter an option number to view information or to connect to an online service. Enter a BEGIN command plus a file number to search a database (e.g., B1 for ERIC).

?

Terminal set to DLINK

*** DIALOG HOMEBASE(SM) Main Menu ***

Information:

1. Announcements (new files, reloads, etc.)
2. Database, Rates, & Command Descriptions
3. Help in Choosing Databases for Your Topic
4. Customer Services (telephone assistance, training, seminars, etc.)
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Connections:

6. DIALOG(R) Document Delivery
7. Data Star(R)

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/H = Help

/L = Logoff

/NOMENU = Command Mode

Enter an option number to view information or to connect to an online service. Enter a BEGIN command plus a file number to search a database (e.g., B1 for ERIC).

? b 155 biosci medicine 399

```
>>>          44 is unauthorized
>>>          76 is unauthorized
>>>          138 is unauthorized
>>>3 of the specified files are not available
    20mar06 10:31:10 User276629 Session D211.1
        $0.00    0.213 DialUnits FileHomeBase
    $0.00 Estimated cost FileHomeBase
    $0.05 TELNET
    $0.05 Estimated cost this search
    $0.05 Estimated total session cost    0.213 DialUnits
```

SYSTEM:OS - DIALOG OneSearch

File 155:MEDLINE(R) 1951-2006/Mar 10

(c) format only 2006 Dialog

***File 155: Medline has been reloaded. Some accession numbers have changed.**

File 5:Biosis Previews(R) 1969-2006/Mar W2

(c) 2006 BIOSIS

File 24:CSA Life Sciences Abstracts 1966-2006/Jan

(c) 2006 CSA.

File 28:Oceanic Abstracts 1966-2006/Jan

(c) 2006 CSA.

File 34:SciSearch(R) Cited Ref Sci 1990-2006/Mar W2

(c) 2006 Inst for Sci Info

File 35:Dissertation Abs Online 1861-2006/Feb
(c) 2006 ProQuest Info&Learning

File 40:Enviroline(R) 1975-2005/Dec

File 41:Pollution Abstracts 1966-2006/Jan
(c) 2006 CSA.

File 50:CAB Abstracts 1972-2006/Feb
(c) 2006 CAB International

File 65:Inside Conferences 1993-2006/Mar 17
(c) 2006 BLDSC all rts. reserv.

File 71:ELSEVIER BIOBASE 1994-2006/Mar W3
(c) 2006 Elsevier Science B.V.

File 73:EMBASE 1974-2006/Mar 20
(c) 2006 Elsevier Science B.V.

File 91:MANTIS(TM) 1880-2006/Feb
2006 (c) Action Potential

File 94:JICST-EPlus 1985-2006/Dec W4
(c)2006 Japan Science and Tech Corp(JST)

File 98:General Sci Abs 1984-2004/Dec
(c) 2005 The HW Wilson Co.

File 110:WasteInfo 1974-2002/Jul
(c) 2002 AEA Techn Env.

***File 110: This file is closed (no updates)**

File 135:NewsRx Weekly Reports 1995-2006/Mar W2
(c) 2006 NewsRx

***File 135: Please see HELP NEWS135 for information on select journal titles.**

File 136:BioEngineering Abstracts 1966-2006/Jan
(c) 2006 CSA.

File 143:Biol. & Agric. Index 1983-2006/Feb
(c) 2006 The HW Wilson Co

File 144:Pascal 1973-2006/Feb W4
(c) 2006 INIST/CNRS

File 164:Allied & Complementary Medicine 1984-2006/Mar
(c) 2006 BLHCIS

File 172:EMBASE Alert 2006/Mar 20
(c) 2006 Elsevier Science B.V.

File 185:Zoological Record Online(R) 1978-2006/Mar
(c) 2006 BIOSIS

File 357:Derwent Biotech Res. 1982-2006/Mar W2
(c) 2006 Thomson Derwent & ISI

File 369:New Scientist 1994-2006/Aug W4
(c) 2006 Reed Business Information Ltd.

File 370:Science 1996-1999/Jul W3
(c) 1999 AAAS

***File 370: This file is closed (no updates). Use File 47 for more current information.**

File 391:Beilstein Reactions 2005/Q3
(c) 2005 Beilstein GmbH

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 1998 Inst for Sci Info

File 467:ExtraMED(tm) 2000/Dec
(c) 2001 Informania Ltd.

***File 467: F467 will close on February 1, 2006.**

File 149:TGG Health&Wellness DB(SM) 1976-2006/Feb W4
(c) 2006 The Gale Group

File 156:ToxFile 1965-2006/Mar W2
(c) format only 2006 Dialog

***File 156: ToxFile has resumed updating with UD20051205.**

File 159:Cancerlit 1975-2002/Oct

(c) format only 2002 Dialog
***File 159: Cancerlit is no longer updating.**
 Please see HELP NEWS159.
 File 162:Global Health 1983-2006/Feb
 (c) 2006 CAB International
 File 266:FEDRIP 2005/Dec
 Comp & dist by NTIS, Intl Copyright All Rights Res
 File 399:CA SEARCH(R) 1967-2006/UD=14412
 (c) 2006 American Chemical Society
***File 399: Use is subject to the terms of your user/customer agreement.**
 IPCR/8 classification codes now searchable as IC=. See HELP NEWSIPCR.
 File 444:New England Journal of Med. 1985-2006/Mar W1
 (c) 2006 Mass. Med. Soc.

Set	Items	Description
? s au=((Weis, W.?) or (weis W?) or (weis W.I.) or (weis, W.I.))	48	AU=WEIS, W.?
	548	AU=WEIS W?
	99	AU=WEIS W.I.
	0	AU=WEIS, W.I.
S1	596	AU=((WEIS, W.?) OR (WEIS W?) OR (WEIS W.I.) OR (WEIS, W.I.))
? s s1 and beta-catenin	596	S1
	12296	BETA-CATENIN
S2	33	S1 AND BETA-CATENIN
? rd		

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.

S3 19 RD (unique items)
 ? s s3 and py<=1998
 Processing
 Processed 10 of 36 files ...
 Processing
 Processing
 Processed 20 of 36 files ...
 >>>One or more prefixes are unsupported
 >>> or undefined in one or more files.
 Processing
 Processed 30 of 36 files ...
 Completed processing all files
 19 S3
 100004928 PY<=1998
 S4 2 S3 AND PY<=1998
 ? t s4/medium/all

4/3/1 (Item 1 from file: 5)
 DIALOG(R)File 5:Biosis Previews(R)
 (c) 2006 BIOSIS. All rts. reserv.

0011113592 BIOSIS NO.: 199799747652

Three-dimensional structure of the armadillo repeat region of beta-catenin
 AUTHOR: Huber Andrew H; Nelson W James; Weis William I (Reprint
 AUTHOR ADDRESS: Dep. Structural Biol., Stanford Univ. Sch. Med., Stanford,
 CA 94305, USA**USA
 JOURNAL: Cell 90 (5): p871-882 1997 1997

ISSN: 0092-8674
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

4/3/2 (Item 2 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)
(c) 2006 BIOSIS. All rts. reserv.

0011086918 BIOSIS NO.: 199799720978

Structural analysis of the Armadillo repeat region of beta-catenin and its interactions with cadherins

AUTHOR: Huber Andrew H; Nelson W James; Weis William I
AUTHOR ADDRESS: Stanford Univ. Sch. Med., Stanford, CA, USA**USA
JOURNAL: FASEB Journal 11 (9): pA1286 1997 1997
CONFERENCE/MEETING: 17th International Congress of Biochemistry and Molecular Biology in conjunction with the Annual Meeting of the American Society for Biochemistry and Molecular Biology San Francisco, California, USA August 24-29, 1997; 19970824
ISSN: 0892-6638
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Citation
LANGUAGE: English
? t s4/full/2

4/9/2 (Item 2 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)
(c) 2006 BIOSIS. All rts. reserv.

0011086918 BIOSIS NO.: 199799720978

Structural analysis of the Armadillo repeat region of beta-catenin and its interactions with cadherins

AUTHOR: Huber Andrew H; Nelson W James; Weis William I
AUTHOR ADDRESS: Stanford Univ. Sch. Med., Stanford, CA, USA**USA
JOURNAL: FASEB Journal 11 (9): pA1286 1997 1997
CONFERENCE/MEETING: 17th International Congress of Biochemistry and Molecular Biology in conjunction with the Annual Meeting of the American Society for Biochemistry and Molecular Biology San Francisco, California, USA August 24-29, 1997; 19970824
ISSN: 0892-6638
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Citation
LANGUAGE: English
DESCRIPTORS:
MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Cell Biology; Development; Genetics; Membranes--Cell Biology; Metabolism; Molecular Genetics--Biochemistry and Molecular Biophysics; Physiology; Tumor Biology
BIOSYSTEMATIC NAMES: Diptera--Insecta, Arthropoda, Invertebrata, Animalia
ORGANISMS: Drosophila (Diptera)
COMMON TAXONOMIC TERMS: Animals; Arthropods; Insects; Invertebrates
MISCELLANEOUS TERMS: ADENOMATOUS POLYPOSIS COLI PROTEIN; ADHERENS JUNCTIONS; ALPHA-CATENIN; APC PROTEIN; ARMADILLO REPEAT REGION; **BETA-CATENIN** ; BIOCHEMISTRY AND BIOPHYSICS; CADHERIN-ASSOCIATED FUNCTIONS; CADHERINS; CELL FATE CHOICE; EMBRYO; EMBRYOGENESIS; FILAMENTOUS ACTIN; INTERACTION; LEF-1/TCF TRANSCRIPTION FACTOR FAMILY MEMBER; STRUCTURE; TRANSCRIPTION FACTOR; TUMOR SUPPRESSOR GENE PRODUCT; Meeting Abstract

CONCEPT CODES:

00520 General biology - Symposia, transactions and proceedings
 02506 Cytology - Animal
 03506 Genetics - Animal
 10064 Biochemistry studies - Proteins, peptides and amino acids
 10068 Biochemistry studies - Carbohydrates
 10300 Replication, transcription, translation
 10506 Biophysics - Molecular properties and macromolecules
 10508 Biophysics - Membrane phenomena
 13004 Metabolism - Carbohydrates
 13012 Metabolism - Proteins, peptides and amino acids
 24006 Neoplasms - Biochemistry
 24007 Neoplasms - Carcinogens and carcinogenesis
 25502 Development and Embryology - General and descriptive
 25508 Development and Embryology - Morphogenesis
 64076 Invertebrata: comparative, experimental morphology, physiology and pathology - Insecta: physiology

BIOSYSTEMATIC CODES:

75314 Diptera
 ? s beta-catenin
 S5 12296 BETA-CATENIN
 ? s s5 and (conductin or axin)
 12296 S5
 265 CONDUCTIN
 2818 AXIN
 S6 627 S5 AND (CONDUCTIN OR AXIN)
 ? rd

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.

S7 423 RD (unique items)
 ? s s7 and py<=1999
 Processing
 Processed 10 of 36 files ...
 Processing
 Processed 20 of 36 files ...
 >>>One or more prefixes are unsupported
 >>> or undefined in one or more files.
 Processing
 Processed 30 of 36 files ...
 Completed processing all files

423 S7
 105586270 PY<=1999
 S8 65 S7 AND PY<=1999
 ? s s8 and (hydrophobic pocket\$)
 65 S8
 0 HYDROPHOBIC POCKET\$
 S9 0 S8 AND (HYDROPHOBIC POCKET\$)
 ? s s8 and ((hydrophobic pocket) or (hydrophobic pockets))
 65 S8
 138 HYDROPHOBIC POCKET
 6 HYDROPHOBIC POCKETS
 S10 0 S8 AND ((HYDROPHOBIC POCKET) OR (HYDROPHOBIC POCKETS))
 ? s s8 and assay
 65 S8
 2362325 ASSAY
 S11 5 S8 AND ASSAY
 ? t s11/medium/all

11/3/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2006 BIOSIS. All rts. reserv.

0012330519 BIOSIS NO.: 200000048832
**A GSK3beta phosphorylation site in Axin modulates interaction with
beta-catenin and Tcf-mediated gene expression**
AUTHOR: Jho Eek-hoon; Lomvardas Stavros; Costantini Frank (Reprint)
AUTHOR ADDRESS: Department of Genetics and Development, College of
Physicians and Surgeons, Columbia University, 701 West 168th Street, New
York, NY, USA**USA
JOURNAL: Biochemical and Biophysical Research Communications 266 (1): p
28-35 Dec. 9, 1999 1999
MEDIUM: print
ISSN: 0006-291X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

11/3/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2006 BIOSIS. All rts. reserv.
0011874525 BIOSIS NO.: 199900134185
**Identification of a domain of axin that binds to the serine/threonine
protein phosphatase 2A and a self-binding domain**
AUTHOR: Hsu Wei; Zeng Li; Costantini Frank (Reprint)
AUTHOR ADDRESS: Dep. Genet. Dev., Coll. Phys. Surg., Columbia Univ., 701 W.
168th St., New York, NY 10032, USA**USA
JOURNAL: Journal of Biological Chemistry 274 (6): p3439-3445 Feb. 5, 1999
1999
MEDIUM: print
ISSN: 0021-9258
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

11/3/3 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2006 Inst for Sci Info. All rts. reserv.
08129326 Genuine Article#: 249XU No. References: 38
**Title: Human frizzled 1 interacts with transforming Wnts to transduce a TCF
dependent transcriptional response**
Author(s): Gazit A; Yaniv A; Bafico A; Pramila T; Igarashi M; Kitajewski J;
Aaronson SA (REPRINT)
Corporate Source: CUNY MT SINAI SCH MED, DERALD H RUTTENBERG CANC CTR, BOX
1130, 1 GUSTAVE L LEVY PL/NEW YORK//NY/10029 (REPRINT); CUNY MT SINAI
SCH MED, DERALD H RUTTENBERG CANC CTR/NEW YORK//NY/10029; TEL AVIV
UNIV, SACKLER SCH MED, DEPT HUMAN MICROBIOL/IL-69978 TEL AVIV//ISRAEL/;
COLUMBIA UNIV COLL PHYS & SURG, DEPT PATHOL/NEW YORK//NY/10032; COLUMBIA
UNIV COLL PHYS & SURG, CTR REPROD SCI/NEW YORK//NY/10032
Journal: ONCOGENE, 1999, V18, N44 (OCT 28), P5959-5966
ISSN: 0950-9232 Publication date: 19991028
Publisher: STOCKTON PRESS, HOUNDMILLS, BASINGSTOKE RG21 6XS, HAMPSHIRE,
ENGLAND

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

11/3/4 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2006 Inst for Sci Info. All rts. reserv.

07726565 Genuine Article#: 201KK No. References: 45

Title: Interaction of Axin and Dvl-2 proteins regulates Dvl-2-stimulated TCF-dependent transcription

Author(s): Smalley MJ; Sara E; Paterson H; Naylor S; Cook D; Jayatilake H; Fryer LG; Hutchinson L (REPRINT) ; Fry MJ; Dale TC

Corporate Source: INST CANC RES, SIGNAL TRANSDUCT TEAM, SECT CELL BIOL & EXPT PATHOL/LONDON SW3 6JB//ENGLAND/ (REPRINT); INST CANC RES, DEV BIOL TEAM, SECT CELL BIOL & EXPT PATHOL/LONDON SW3 6JB//ENGLAND/; INST CANC RES, SIGNAL TRANSDUCT TEAM, SECT CELL BIOL & EXPT PATHOL/LONDON SW3 6JB//ENGLAND/; INST CANC RES, CHESTER BEATTY LABS, SECT CELL & MOL BIOL/LONDON SW3 6JB//ENGLAND/; OXFORD BIOMEDICA, /OXFORD OX4 4GA//ENGLAND/

Journal: EMBO JOURNAL, 1999, V18, N10 (MAY 17), P2823-2835

ISSN: 0261-4189 Publication date: 19990517

Publisher: OXFORD UNIV PRESS, GREAT CLARENDON ST, OXFORD OX2 6DP, ENGLAND

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

11/3/5 (Item 1 from file: 357)

DIALOG(R)File 357:Derwent Biotech Res.

(c) 2006 Thomson Derwent & ISI. All rts. reserv.

0242422 DBR Accession No.: 1999-13187 PATENT

Agents for treating human diseases, particularly cancer, modulate interaction of beta-catenin with transcription factors or tumor suppressor gene products - protein capable of inhibiting or promoting beta-catenin interaction, produced by protein engineering, used in tumor therapy and organ growth stimulation

AUTHOR: Birchmeier W; von Kries J P

CORPORATE SOURCE: Berlin, Germany.

PATENT ASSIGNEE: Max-Delbrueck-Cent.Mol.Med.Berlin 1999

PATENT NUMBER: DE 19909251 PATENT DATE: 19990826 WPI ACCESSION NO.: 1999-470389 (1940)

PRIORITY APPLIC. NO.: DE 1009251 APPLIC. DATE: 19990222

NATIONAL APPLIC. NO.: DE 1009251 APPLIC. DATE: 19990222

LANGUAGE: German

? t/s11/full/2

>>>'11' valid only in keyword format

?

PLEASE ENTER A COMMAND OR BE LOGGED OFF IN 5 MINUTES

? ds

Set	Items	Description
S1	596	AU=((WEIS, W.?) OR (WEIS W?) OR (WEIS W.I.) OR (WEIS, W.I.-))
S2	33	S1 AND BETA-CATENIN
S3	19	RD (unique items)
S4	2	S3 AND PY<=1998
S5	12296	BETA-CATENIN
S6	627	S5 AND (CONDUCTIN OR AXIN)
S7	423	RD (unique items)
S8	65	S7 AND PY<=1999

S9 0 S8 AND (HYDROPHOBIC POCKET\$)
 S10 0 S8 AND ((HYDROPHOBIC POCKET) OR (HYDROPHOBIC POCKETS))
 S11 5 S8 AND ASSAY
 ? s s8 and GRASP
 65 S8
 30980 GRASP
 S12 0 S8 AND GRASP
 ? s s8 and computer
 65 S8
 2783095 COMPUTER
 S13 0 S8 AND COMPUTER
 ? s s8 and (three-dimensional)
 65 S8
 23830 THREE-DIMENSIONAL
 S14 0 S8 AND (THREE-DIMENSIONAL)
 ? t s8/ti/all
 >>>No matching display code(s) found in file(s): 391

8/TI/1 (Item 1 from file: 5)
 DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

**Regulation of beta-catenin signaling by the B56 subunit of protein
phosphatase 2A**

8/TI/2 (Item 2 from file: 5)
 DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

**Membrane-anchored plakoglobins have multiple mechanisms of action in Wnt
signaling**

8/TI/3 (Item 3 from file: 5)
 DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

The deubiquitinating enzyme Fam interacts with and stabilizes beta-catenin

8/TI/4 (Item 4 from file: 5)
 DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

The control of beta-catenin and TCF during embryonic development and cancer

8/TI/5 (Item 5 from file: 5)
 DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Modulation of Wnt signaling by Axin and Axil

8/TI/6 (Item 6 from file: 5)
 DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Signaling through beta-catenin and Lef/Tcf

8/TI/7 (Item 7 from file: 5)
 DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

APC: The plot thickens

8/TI/8 (Item 8 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

A GSK3beta phosphorylation site in Axin modulates interaction with beta-catenin and Tcf-mediated gene expression

8/TI/9 (Item 9 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Roles of Axin in the Wnt signalling pathway

8/TI/10 (Item 10 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Identification and characterization of E-APC, a novel Drosophila homologue of the tumour suppressor APC

8/TI/11 (Item 11 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Casein kinase Iepsilon in the Wnt pathway: Regulation of beta-catenin function

8/TI/12 (Item 12 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Axin directly interacts with plakoglobin and regulates its stability

8/TI/13 (Item 13 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

A GSK3-binding peptide from FRAT1 selectively inhibits the GSK3-catalysed phosphorylation of Axin and beta-catenin

8/TI/14 (Item 14 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Nuclear localization and formation of beta-catenin-lymphoid enhancer factor 1 complexes are not sufficient for activation of gene expression

8/TI/15 (Item 15 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

DIX domains of Dvl and Axin are necessary for protein interactions and their ability to regulate beta-catenin stability

8/TI/16 (Item 16 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Functional domains of Axin . Importance of the C terminus as an
oligomerization domain

8/TI/17 (Item 17 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

beta-Trcp couples beta-catenin phosphorylation-degradation and regulates
Xenopus axis formation

8/TI/18 (Item 18 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Domains of axin involved in protein-protein interactions, Wnt pathway
inhibition, and intracellular localization

8/TI/19 (Item 19 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Role of beta-catenin/armadillo in cell adhesion and signal transduction

8/TI/20 (Item 20 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

The cyclin D1 gene is a target of the beta-catenin/LEF-1 pathway

8/TI/21 (Item 21 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

An F-box protein, FWD1, mediates ubiquitin-dependent proteolysis of
beta-catenin

8/TI/22 (Item 22 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Negative regulation of wingless signaling by D- Axin , a Drosophila Homolog
of Axin

8/TI/23 (Item 23 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Frequent nuclear/cytoplasmic localization of beta-catenin without exon 3
mutations in malignant melanoma

8/TI/24 (Item 24 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

APC protein: Protein interactions and cellular functions

8/TI/25 (Item 25 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Axin prevents Wnt-3a-induced accumulation of beta-catenin

8/TI/26 (Item 26 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Identification of a domain of axin that binds to the serine/threonine protein phosphatase 2A and a self-binding domain

8/TI/27 (Item 27 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Identification of APC2, a homologue of the adenomatous polyposis coli tumour suppressor

8/TI/28 (Item 28 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Differential molecular interactions of BETA-catenin and pakoglobin in adhesion, signaling and cancer

8/TI/29 (Item 29 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Axin , an inhibitor of the Wnt signalling pathway, interacts with beta-catenin, GSK-3beta and APC and reduces the beta-catenin level

8/TI/30 (Item 30 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Downregulation of beta-catenin by human Axin and its association with the APC tumor suppressor, beta-catenin and GSK3beta

8/TI/31 (Item 31 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Axis determination of Xenopus involves biochemical interactions of axin , glycogen synthase kinase 3 and beta-catenin

8/TI/32 (Item 32 from file: 5)
DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Axin , a negative regulator of the Wnt signaling pathway, directly interacts with adenomatous polyposis coli and regulates the stabilization

of beta-catenin

8/TI/33 (Item 33 from file: 5)

DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Functional interaction of an axin homolog, conductin , with
beta-catenin, APC and GSK3beta

8/TI/34 (Item 34 from file: 5)

DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Axil, a member of the axin family, interacts with both glycogen synthase
kinase 3beta and beta-catenin and inhibits axis formation of Xenopus
embryos

8/TI/35 (Item 35 from file: 5)

DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Briding of beta-catenin and glycogen synthase kinase-3beta by axin and
inhibition of beta-catenin-mediated transcription

8/TI/36 (Item 36 from file: 5)

DIALOG(R)File 5:(c) 2006 BIOSIS. All rts. reserv.

Axin , a negative regulator of the Wnt signaling pathway, forms a complex
with GSK-3beta and beta-catenin and promotes GSK-3beta-dependent
phosphorylation of beta-catenin

8/TI/37 (Item 1 from file: 34)

DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Adenomatous polyposis coil protein (APC)-independent regulation of
beta-catenin/Tcf-4 mediated transcription in intestinal cells

8/TI/38 (Item 2 from file: 34)

DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Dysregulated expression of beta-catenin marks early neoplastic
change in Apc mutant mice, but not all lesions arising in Msh2
deficient mice

8/TI/39 (Item 3 from file: 34)

DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Axin forms a complex with MEKK1 and activates c-Jun NH2-terminal
kinase/stress-activated protein kinase through domains distinct from
Wnt signaling

8/TI/40 (Item 4 from file: 34)

DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: beta-catenin signaling and cancer

8/TI/41 (Item 5 from file: 34)

DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Relationship of vegetal cortical dorsal factors in the Xenopus egg with the Wnt/beta-catenin signaling pathway

8/TI/42 (Item 6 from file: 34)

DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Divergence of RGS proteins: evidence for the existence of six mammalian RGS subfamilies

8/TI/43 (Item 7 from file: 34)

DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Casein kinase I epsilon in the Wnt pathway: Regulation of beta-catenin function

8/TI/44 (Item 8 from file: 34)

DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Human frizzled 1 interacts with transforming Wnts to transduce a TCF dependent transcriptional response

8/TI/45 (Item 9 from file: 34)

DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Suppression of glycogen synthase kinase activity is not sufficient for leukemia enhancer factor-1 activation

8/TI/46 (Item 10 from file: 34)

DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Radiation hybrid mapping of genes in the lithium-sensitive Wnt signaling pathway

8/TI/47 (Item 11 from file: 34)

DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: A new Drosophila APC homologue associated with adhesive zones of epithelial cells

8/TI/48 (Item 12 from file: 34)

DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: The APC protein binds to A/T rich DNA sequences

8/TI/49 (Item 13 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: A Drosophila Axin homolog, Daxin, inhibits Wnt signaling

8/TI/50 (Item 14 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Up-regulation of macrophage wnt gene expression in adenoma-carcinoma progression of human colorectal cancer

8/TI/51 (Item 15 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Regulation of glycogen synthase kinase 3 beta and downstream Wnt signaling by axin

8/TI/52 (Item 16 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Axin and Frat1 interact with Dvl and GSK, bridging Dvl to GSK in Wnt-mediated regulation of LEF-1

8/TI/53 (Item 17 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Regulation of the protein kinase activity of Shaggy(Zeste-white3) by components of the wingless pathway in Drosophila cells and embryos

8/TI/54 (Item 18 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Wnt-induced dephosphorylation of Axin releases beta-catenin from the Axin complex

8/TI/55 (Item 19 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Neoplastic transformation of RK3E by mutant beta-catenin requires deregulation of Tcf/Lef transcription but not activation of c-myc expression

8/TI/56 (Item 20 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Interaction of Axin and Dvl-2 proteins regulates Dvl-2-stimulated TCF-dependent transcription

8/TI/57 (Item 21 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Phosphorylation of Axin , a Wnt signal negative regulator, by
glycogen synthase kinase-3 beta regulates its stability

8/TI/58 (Item 22 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Cloning of the human homolog of conductin (AXIN2) , a gene mapping
to chromosome 17q23-q24

8/TI/59 (Item 23 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: beta-TrCP is a negative regulator of the Wnt/beta-catenin signaling
pathway and dorsal axis formation in Xenopus embryos

8/TI/60 (Item 24 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Differential molecular interactions of beta-catenin and plakoglobin
in adhesion, signaling and cancer

8/TI/61 (Item 25 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Axis determination in Xenopus involves biochemical interactions of
axin , glycogen synthase kinase 3 and beta-catenin

8/TI/62 (Item 26 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Communication - Axin , a negative regulator of the Wnt signaling
pathway, directly interacts with adenomatous polyposis coli and
regulates the stabilization of beta-catenin

8/TI/63 (Item 27 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: Bridging of beta-catenin and glycogen synthase kinase-3 beta by
Axin and inhibition of beta-catenin-mediated transcription

8/TI/64 (Item 28 from file: 34)
DIALOG(R)File 34:(c) 2006 Inst for Sci Info. All rts. reserv.

Title: The mouse fused locus encodes Axin , an inhibitor of the Wnt
signaling pathway that regulates embryonic axis formation

8/TI/65 (Item 1 from file: 357)

DIALOG(R)File 357:(c) 2006 Thomson Derwent & ISI. All rts. reserv.

Agents for treating human diseases, particularly cancer, modulate interaction of beta-catenin with transcription factors or tumor suppressor gene products - protein capable of inhibiting or promoting beta-catenin interaction, produced by protein engineering, used in tumor therapy and organ growth stimulation

? t s8/full/40 33 25 19 18 9 6

8/9/40 (Item 4 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2006 Inst for Sci Info. All rts. reserv.

08234284 Genuine Article#: 260WJ Number of References: 85

Title: beta-catenin signaling and cancer

Author(s): Morin PJ (REPRINT)

Corporate Source: NIA,BIOL CHEM LAB, GERONTOL RES CTR, 5600 NATHAN SHOCK DR/BALTIMORE//MD/21224 (REPRINT); JOHNS HOPKINS MED INST,DEPT PATHOL/BALTIMORE//MD/21287

Journal: BIOESSAYS, 1999 , V21, N12 (DEC), P1021-1030

ISSN: 0265-9247 Publication date: 19991200

Publisher: COMPANY OF BIOLOGISTS LTD, BIDDER BUILDING CAMBRIDGE COMMERCIAL PARK COWLEY RD, CAMBRIDGE CB4 4DL, CAMBS, ENGLAND

Language: English Document Type: REVIEW

Geographic Location: USA

Subfile: CC LIFE--Current Contents, Life Sciences

Journal Subject Category: BIOLOGY; BIOCHEMISTRY & MOLECULAR BIOLOGY

Abstract: Since its discovery as a protein associated with the cytoplasmic region of E-cadherin, beta-catenin has been shown to perform two apparently unrelated functions: it has a crucial role in cell-cell adhesion in addition to a signaling role as a component of the Wnt/wg pathway. Wnt/wg signaling results in beta-catenin accumulation and transcriptional activation of specific target genes during development. It is now apparent that deregulation of beta-catenin signaling is an important event in the genesis of a number of malignancies, such as colon cancer, melanoma, hepatocellular carcinoma, ovarian cancer, endometrial cancer, medulloblastoma pilomatricomas, and prostate cancer. beta-catenin mutations appear to be a crucial step in the progression of a subset of these cancers, suggesting an important role in the control of cellular proliferation or cell death. The APC/beta-catenin pathway is highly regulated and includes players such as GSK3-beta, CBP, Groucho, Axin, Conductin, and TCF, c-MYC and cyclin D1 were recently identified as a key transcriptional targets of this pathway and additional targets are likely to emerge. BioEssays 21:1021-1030, 1999. Published 1999 John Wiley & Sons, Inc.dagger

Identifiers--Keyword Plus(R): TUMOR-SUPPRESSOR PROTEIN; ADENOMATOUS POLYPOSIS-COLI; UBIQUITIN-PROTEASOME PATHWAY; TRANSCRIPTION FACTOR LEF-1; CELL-ADHESION MOLECULE; XENOPUS EMBRYOS; GENE-PRODUCT; HEPATOCELLULAR CARCINOMAS; FUNCTIONAL INTERACTION; NUCLEAR-LOCALIZATION

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 WALTZER L, 1998, V395, P521, NATURE
 WHITEHEAD I, 1995, V15, P704, MOL CELL BIOL
 WINSTON JT, 1999, V13, P270, GENE DEV
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8/9/33 (Item 33 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2006 BIOSIS. All rts. reserv.

0011457577 BIOSIS NO.: 199800251824

**Functional interaction of an axin homolog, conductin, with
 beta-catenin, APC and GSK3beta**

AUTHOR: Behrens Juergen; Jerchow Boris-Alexander; Wuertele Martin; Grimm
 Jan; Asbrand Christian; Wirtz Ralph; Kuehl Michael; Wedlich Doris;
 Birchmeier Walter (Reprint)

AUTHOR ADDRESS: Max Delbrueck Cent. Mol. Med., Robert-Roessle-Strasse 10,
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JOURNAL: Science (Washington D C) 280 (5363): p596-599 April 24, 1998
1998

MEDIUM: print

ISSN: 0036-8075

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Control of stability of beta-catenin is central in the wnt
 signaling pathway. Here, the protein **conductin** was found to form a
 complex with both beta-catenin and the tumor suppressor gene product
 adenomatous polyposis coli (APC). **Conductin** induced beta-catenin
 degradation, whereas mutants of **conductin** that were deficient in
 complex formation stabilized beta-catenin. Fragments of APC that
 contained a **conductin**-binding domain also blocked beta-catenin
 degradation. Thus, **conductin** is a component of the multiprotein complex
 that directs beta-catenin to degradation and is located downstream of
 APC. In *Xenopus* embryos, **conductin** interfered with wnt-induced axis
 formation.

DESCRIPTORS:

MAJOR CONCEPTS: Biochemistry and Molecular Biophysics

BIOSYSTEMATIC NAMES: Salientia--Amphibia, Vertebrata, Chordata, Animalia

ORGANISMS: *Xenopus* (Salientia)--embryo

COMMON TAXONOMIC TERMS: Amphibians; Animals; Chordates; Nonhuman
 Vertebrates; Vertebrates

CHEMICALS & BIOCHEMICALS: adenomatous polyposis coli {APC}--tumor
suppressor gene product; **beta-catenin** ; **conductin** --analysis, **axin**
homolog; GSK3-beta
METHODS & EQUIPMENT: biochemical analysis--analytical method,
methodological approach
MISCELLANEOUS TERMS: amino acid sequence
CONCEPT CODES:
10064 Biochemistry studies - Proteins, peptides and amino acids
25502 Development and Embryology - General and descriptive
BIOSYSTEMATIC CODES:
85306 Salientia

8/9/25 (Item 25 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0011876187 BIOSIS NO.: 199900135847
Axin prevents Wnt-3a-induced accumulation of beta-catenin
AUTHOR: Kishida Michiko; Koyama Shinya; Kishida Shosei; Matsubara Kenji;
Nakashima Shintaro; Higano Keiichi; Takada Ritsuko; Takada Shinji;
Kikuchi Akira (Reprint)
AUTHOR ADDRESS: Dep. Biochem., Hiroshima Univ. Sch. Med., 1-2-3 Kasumi,
Minami-ku, Hiroshima 734-8551, Japan**Japan
JOURNAL: Oncogene 18 (4): p979-985 Jan., 1999 1999
MEDIUM: print
ISSN: 0950-9232
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: When **Axin** , a negative regulator of the Wnt signaling pathway,
was expressed in COS cells, it coeluted with glycogen synthase
kinase-3beta (GSK-3beta), beta-catenin, an adenomatous polyposis coli
protein (APC) in a high molecular weight fraction on gel filtration
column chromatography. In this fraction. GSK-3beta, beta-catenin, and APC
were co-precipitated with **Axin** . Although beta- catenin was detected in
the high molecular weight fraction in L cells on gel filtration column
chromatography, addition of conditioned medium expressing Wnt3a to the
cells increased beta-catenin in the low molecular weight fraction.
However, Wnt-3a-dependent accumulation of beta-catenin was greatly
inhibited in L cells stably expressing **Axin** . **Axin** also suppressed
Wnt-3a-dependent activation of Tcf-4 which binds to beta-catenin and acts
as a transcription factor. These results suggest that **Axin** forms a
complex with GSK-3beta, beta-catenin, and APC, resulting in the
stimulation of the degradation of beta-catenin and that Wnt-3a induces
the dissociation of beta-catenin from the **Axin** complex and accumulates
catenin.

DESCRIPTORS:
MAJOR CONCEPTS: Cell Biology
BIOSYSTEMATIC NAMES: Cercopithecidae--Primates, Mammalia, Vertebrata,
Chordata, Animalia
ORGANISMS: COS cell line (Cercopithecidae)
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Mammals;
Nonhuman Vertebrates; Nonhuman Primates; Primates; Vertebrates
CHEMICALS & BIOCHEMICALS: adenomatous polyposis coli protein {APC};
axin ; **beta-catenin** --accumulation, degradation; glycogen synthase
kinase-3-beta; Tcf-4--transcription factor

MISCELLANEOUS TERMS: Wnt signaling pathway
CONCEPT CODES:
02506 Cytology - Animal
03506 Genetics - Animal
10060 Biochemistry studies - General
10802 Enzymes - General and comparative studies: coenzymes
24002 Neoplasms - General
BIOSYSTEMATIC CODES:
86205 Cercopithecidae

8/9/19 (Item 19 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0012028632 BIOSIS NO.: 199900288292
Role of beta-catenin/armadillo in cell adhesion and signal transduction
AUTHOR: Birchmeier Walter (Reprint)
AUTHOR ADDRESS: Max-Delbrueck-Center for Molecular Medicine,
Robert-Roessle-Strasse 10, 13125, Berlin, Germany**Germany
JOURNAL: European Journal of Cell Biology 78 (SUPPL. 49): p2 1999 1999
MEDIUM: print
CONFERENCE/MEETING: 23rd Annual Meeting of the German Society for Cell
Biology Rostock, Germany March 14-18, 1999; 19990314
SPONSOR: German Society for Cell Biology
ISSN: 0171-9335
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Citation
LANGUAGE: English
DESCRIPTORS:
MAJOR CONCEPTS: Cell Biology; Enzymology--Biochemistry and Molecular
Biophysics
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata,
Animalia
ORGANISMS: human (Hominidae)
ORGANISMS: PARTS ETC: cell--adhesion
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates;
Vertebrates
CHEMICALS & BIOCHEMICALS: **beta-catenin ; conductin ; wnt--signaling;**
APC; GSK3-beta--serine/threonine kinase
MISCELLANEOUS TERMS: signal transduction; Meeting Abstract; Meeting
Abstract
CONCEPT CODES:
02508 Cytology - Human
10060 Biochemistry studies - General
10808 Enzymes - Physiological studies
00520 General biology - Symposia, transactions and proceedings
BIOSYSTEMATIC CODES:
86215 Hominidae

8/9/18 (Item 18 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0012063324 BIOSIS NO.: 199900322984
**Domains of axin involved in protein-protein interactions, Wnt pathway
inhibition, and intracellular localization**
AUTHOR: Fagotto Francois; Jho Eek-hoon; Zeng Li; Kurth Thomas; Joos Thomas;

Kaufmann Christine; Costantini Frank (Reprint)
AUTHOR ADDRESS: Department of Genetics and Development, College of
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York, NY, 10032, USA**USA
JOURNAL: Journal of Cell Biology 145 (4): p741-756 May 17, 1999 1999
MEDIUM: print
ISSN: 0021-9525
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: **Axin** was identified as a regulator of embryonic axis induction in vertebrates that inhibits the Wnt signal transduction pathway. Epistasis experiments in frog embryos indicated that **Axin** functioned downstream of glycogen synthase kinase 3beta (GSK3beta) and upstream of beta-catenin, and subsequent studies showed that **Axin** is part of a complex including these two proteins and adenomatous polyposis coli (APC). Here, we examine the role of different **Axin** domains in the effects on axis formation and beta-catenin levels. We find that the regulators of G-protein signaling domain (major APC-binding site) and GSK3beta-binding site are required, whereas the COOH-terminal sequences, including a protein phosphatase 2A binding site and the DIX domain, are not essential. Some forms of **Axin** lacking the beta-catenin binding site can still interact indirectly with beta-catenin and regulate beta-catenin levels and axis formation. Thus in normal embryonic cells, interaction with APC and GSK3beta is critical for the ability of **Axin** to regulate signaling via beta-catenin. Myc-tagged **Axin** is localized in a characteristic pattern of intracellular spots as well as at the plasma membrane. NH2-terminal sequences were required for targeting to either of these sites, whereas COOH-terminal sequences increased localization at the spots. Coexpression of hemagglutinin-tagged Dishevelled (Dsh) revealed strong colocalization with **Axin**, suggesting that Dsh can interact with the **Axin** /APC/GSK3/beta-catenin complex, and may thus modulate its activity.

DESCRIPTORS:

MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Development
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: 293 cell line (Hominidae)
ORGANISMS: PARTS ETC: plasma membrane
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
CHEMICALS & BIOCHEMICALS: adenomatous polyposis coli; **beta-catenin**; glycogen synthase kinase 3-beta; **Axin** --COOH-terminal sequences, G-protein signaling domain, Myc-tagged, embryonic axis induction regulator, localization, glycogen synthase kinase 3-beta-binding site; Dishevelled--hemagglutinin-tagged
MISCELLANEOUS TERMS: dorsal axis formation; protein-protein interactions

CONCEPT CODES:

02508 Cytology - Human
10060 Biochemistry studies - General
10502 Biophysics - General
25502 Development and Embryology - General and descriptive
00532 General biology - Miscellaneous

BIOSYSTEMATIC CODES:

86215 Hominidae

8/9/9 (Item 9 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0012314895 BIOSIS NO.: 200000033208

Roles of Axin in the Wnt signalling pathway

AUTHOR: Kikuchi Akira (Reprint)

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JOURNAL: Cellular Signalling 11 (11): p777-788 Nov., 1999 1999

MEDIUM: print

ISSN: 0898-6568

DOCUMENT TYPE: Article; Literature Review

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: The Wnt signalling pathway is conserved in various species from worms to mammals, and plays important roles in development, cellular proliferation, and differentiation. The molecular mechanisms by which the Wnt signal regulates cellular functions are becoming increasingly well understood. Wnt stabilizes cytoplasmic beta-catenin, which stimulates the expression of genes including c-myc, c-jun, fra-1, and cyclin D1. **Axin**, newly recognized as a component of the Wnt signalling pathway, negatively regulates this pathway. Other components of the Wnt signalling pathway, including Dvl, glycogen synthase kinase-3beta, beta-catenin, and adenomatous polyposis coli, interact with **Axin**, and the phosphorylation and stability of beta-catenin are regulated in the **Axin** complex. Thus, **Axin** acts as a scaffold protein in the Wnt signalling pathway, thereby regulating cellular functions.

DESCRIPTORS:

MAJOR CONCEPTS: Biochemistry and Molecular Biophysics

BIOSYSTEMATIC NAMES: Salientia--Amphibia, Vertebrata, Chordata, Animalia

ORGANISMS: Xenopus (Salientia)--embryo

COMMON TAXONOMIC TERMS: Amphibians; Animals; Chordates; Nonhuman
Vertebrates; Vertebrates

CHEMICALS & BIOCHEMICALS: Dvl; Wnt--cellular function regulation,
cellular proliferation, development, differentiation, molecular
mechanisms, signaling pathway; **axin** --role; **beta-catenin**; glycogen
synthase-3beta; organism c-jun gene; organism c-myc gene; organism
cyclin-D1 gene; organism fra-1 gene

CONCEPT CODES:

10060 Biochemistry studies - General

03502 Genetics - General

10802 Enzymes - General and comparative studies: coenzymes

BIOSYSTEMATIC CODES:

85306 Salientia

8/9/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0012357627 BIOSIS NO.: 200000075940

Signaling through beta-catenin and Lef/Tcf

AUTHOR: Novak A; Dedhar S (Reprint)

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ABSTRACT: beta-Catenin plays a structural role in cell adhesion by binding to cadherins at the intracellular surface of the plasma membrane and a signaling role in the cytoplasm as the penultimate downstream mediator of the Wnt signaling pathway. The ultimate mediator of this pathway is a nuclear complex of beta-catenin acting as a coactivator with lymphoid enhancer factor/T cell factor (Lef/Tcf) transcription factors to stimulate transcription of a variety of target genes. Signaling through beta-catenin is regulated by modulating its degradation and nuclear translocation. In the absence of an activating signal, phosphorylation of beta-catenin by glycogen synthase kinase 3 (GSK3) acting in conjunction with adenomatous polyposis coli and **axin** / **conductin** causes beta-catenin to interact with the beta-transducin repeat-containing protein which results in its ubiquitination and degradation. Signaling from the Wnt pathway activates Dishevelled which, in an as yet undefined manner, inhibits the activity of GSK3 resulting in an increase in the cytoplasmic free pool of beta-catenin, and translocation into the nucleus. The integrin-linked kinase (ILK) pathway also activates beta-catenin-Lef/Tcf signaling. ILK phosphorylates GSK3 to inhibit its activity and translocates beta-catenin into the nucleus. In addition, ILK downregulates the expression of E-cadherin and upregulates Lef-1 expression. In the final step of the beta-catenin-Lef/Tcf signaling pathway, nuclear beta-catenin binds pTIN52-TATA binding protein and displaces Groucho-related gene or CREB-binding protein corepressors from Lef/ Tcf resulting in stimulation of transcription. During development, beta-catenin-Lef/Tcf signaling is involved in the formation of dorsal mesoderm and dorsal axis. Furthermore, defects in the beta-catenin-Lef/Tcf pathway are involved in the development of several types of cancers.

DESCRIPTORS:

MAJOR CONCEPTS: Cell Biology

BIOSYSTEMATIC NAMES: Vertebrata--Chordata, Animalia

ORGANISMS: vertebrate (Vertebrata)--animal model

COMMON TAXONOMIC TERMS: Animals; Chordates; Nonhuman Vertebrates; Vertebrates

CHEMICALS & BIOCHEMICALS: **beta-catenin** --cell membrane signaling; lymphoid enhancer factor-T-cell factor--cell membrane signaling

CONCEPT CODES:

02506 Cytology - Animal

10064 Biochemistry studies - Proteins, peptides and amino acids

10508 Biophysics - Membrane phenomena

13012 Metabolism - Proteins, peptides and amino acids

15008 Blood - Lymphatic tissue and reticuloendothelial system

15004 Blood - Blood cell studies

13004 Metabolism - Carbohydrates

10068 Biochemistry studies - Carbohydrates

28002 Laboratory animals - General

BIOSYSTEMATIC CODES:

85150 Vertebrata

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S5	1519299	((crystal) or (xtal) or (3D) or (xray) or (x-ray) or (NMR))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/20 11:03
S6	982	S5 and beta-catenin	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/20 11:09
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Title THE ARMADILLO REPEAT REGION FROM MURINE BETA-CATENIN

Authors Huber, A.H., Nelson, W.J., Weis, W.I.

Primary Citation Huber, A.H., Nelson, W.J., Weis, W.I. Three-dimensional structure of the armadillo repeat region of beta-catenin. *Cell* v90 pp.871-882, 1997

[\[Abstract \]](#)
History

Deposition 1997-07-31 Release 1997-11-19

Experimental Method

 Type X-RAY DIFFRACTION Data
[EDS]

Parameters

Resolution [Å]	R-Value	R-Free	Space Group
2.10	0.229 (obs.)	0.260	C 2 2 2 ₁

Unit Cell

Length [Å]	Angles [°]
a = 64.10 b = 102.00 c = 187.00	alpha 90.00 beta 90.00 gamma 90.00

Molecular Description Asymmetric Unit

 monomer (protein 470 residues)
 Polymer: 1 Molecule: BETA-CATENIN
 Fragment: ARMADILLO REPEAT REGION Chains: _;

Functional Class
Armadillo Repeat
Source

 Polymer: 1 Scientific Name: **Mus musculus** Common Name: **Mus musculus**
 system: **Mus musculus**
Chemical Component

Identifier Name	Formula	Drug Similarit
URE UREA	C ₂ H ₄ N ₂ O	[View]
MSE SELENOMETHIONINE	C ₅ H ₁₁ N O ₂ Se	[View]
CL CHLORIDE ION	Cl ⁻	[View]

SCOP

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Biological Molecule


Title THE ARMADILLO REPEAT REGION FROM MURINE BETA-CATENIN

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[\[Abstract \]](#)
History Deposition 1997-07-30 Release 1997-10-15

Experimental Method Type X-RAY DIFFRACTION Data
 [EDS]

Parameters Resolution [Å] R-Value R-Free Space Group
 2.90 0.211 (obs.) 0.288 P 2₁ 2₁ 2₁
Unit Cell Length [Å] a 51.09 b 75.59 c 134.42
 Angles [°] alpha 90.00 beta 90.00 gamma 90.00

Molecular Description Asymmetric Unit monomer (protein 516 residues)
 Polymer: 1 Molecule: BETA-CATENIN
 Fragment: ARMADILLO REPEAT REGION Chains: _;

Functional Class Structural Protein

Source Polymer: 1 Scientific Name: **Mus musculus** Common Name: **Mus musculus**
 system: **Mus musculus**
SCOP Classification (version 1.69) Domain Info Class Fold Superfamily Family Dom
 d2bct__ All alpha proteins alpha-alpha superhelix ARM repeat Armadillo repeat beta-Cater

CATH Classification (version v2.6.0) Domain Class Architecture Topology
 2bct00 Mainly Alpha Horseshoe Leucine-rich Repeat Varian

Display
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 Protein
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 All Ir